Claims 1-26 remain in the present application.   Claims 1, 4-5, 10, 21 and 24 are amended herein. Applicants respectfully assert that no new matter has been added as a result of the claim amendments. Applicants respectfully request further examination and reconsideration of the rejections based on the arguments set forth below.

Claim Rejections – 35 U.S.C. §103

Claims 1-3, 5-7, 9-11, 14-15, 18-21 and 26

Claims 1-3, 5-7, 9-11, 14-15, 18-21 and 26 are rejected under 35 U.S.C. §103(a) as being unpatentable over United States Patent Number 5,563,950 to Easter et al. (hereafter referred to as "Easter") in view of United States Patent Number 4,634,807 to Chorley et al. (hereafter referred to as "Chorley"). Applicants have reviewed the cited references and respectfully submit that the embodiments of the present invention as recited in Claims 1-3, 5-7, 9-11, 14-15, 18-21 and 26 are not rendered obvious by Easter in view of Chorley for the following reasons.

Applicants respectfully direct the Examiner to independent Claim 1 that recites a processor with secure cryptographic capabilities comprising (emphasis added):

> a digital secret comprising a secret key used in a key-based cryptographic process, wherein said digital secret is stored only within said processor, and wherein said digital secret is operable to be used exclusively by said processor for both encryption and decryption;

a cryptography engine for performing said key-based cryptographic process internally within said processor, said cryptography engine operable to access said digital secret; and

internal memory coupled to said cryptography engine for supporting said key-based cryptographic process, wherein said internal memory is further for storing data associated with said key-based cryptographic process, and wherein said data is accessible only within said processor.

Independent Claims 10 and 21 recite limitations similar to independent Claim 1.

Claims 2-3, 5-7, 9, 11, 14-15, 18-20 and 26 depend from their respective independent Claims and recite further limitations to the claimed invention.

Applicants respectfully submit that Easter fails to teach or suggest the limitations of "wherein said internal memory is further for storing data associated with said key-based cryptographic process" and "wherein said data is accessible only within said processor" as recited in independent Claim 1. As recited and described in the present application, an internal memory is operable to store data associated with a key-based cryptographic process, where the data is accessible only within the processor (page 12, lines 4-13).

In contrast to the claimed embodiments, Applicants fail to find any teaching or suggestion in Easter of a memory within a processor for storing data associated with a key-based cryptographic process as claimed. Further, Applicants fail to find any teaching or suggestion in Easter of a memory within a processor for storing data *which is accessible only within the processor* as claimed. Accordingly, Applicants reiterate that Easter fails to teach or suggest the limitations of "wherein said internal memory is further for storing data

associated with said key-based cryptographic process" and "wherein said data is accessible only within said processor" as recited in independent Claim 1.

Applicants respectfully assert that Chorley, either alone or in combination with Easter, fails to cure the deficiencies of Easter discussed herein. Applicants respectfully assert that Chorley, either alone or in combination with Easter, also fails to teach or suggest the limitations of "wherein said internal memory is further for storing data associated with said key-based cryptographic process" and "wherein said data is accessible only within said processor" as recited in independent Claim 1.

Additionally, Applicants respectfully submit that one of ordinary skill in the art would not be motivated to implement Easter's IC 53 within Chorley's processor. For example, Easter <u>teaches away</u> from such a combination by teaching an integrated circuit (e.g., IC 53 and IC 63) which is a stand-alone, encapsulated IC chip *separate from* CPU 13 (Figure 2; Figure 5; col. 5, lines 7-25). Further, Chorley teaches that the security of the processor is poor and that "[a]n intruder could, for example, load software into the secure processor, the software being designed to disclose the keys or other sensitive information stored within it" (col. 1, lines 47-50). Accordingly, Chorley also <u>teaches away</u> from combining Easter and Chorley in the claimed fashion since it would decrease the security of information and reveal keys and other sensitive information. Therefore, Applicants reiterate that one of ordinary skill in the art would not be motivated to combine Easter and Chorley in the claimed fashion.

Although page 9 of the rejection states that "it would have been obvious to incorporate Easter's IC chip 53 as part of Chorley's secure processor" since "the IC chip disclosed by Easter is meant to be incorporated as part of further circuitry," Applicants respectfully disagree with the rejection's interpretation of Easter. Applicants respectfully assert that Easter's reference to "incorporation into circuitry" refers to electrically coupling the encapsulated IC chip to other circuit components (e.g., via soldering the components to a printed circuit board) instead of incorporating the IC chip within another integrated circuit as suggested by the rejection. Applicants respectfully assert that incorporating one encapsulated IC within another encapsulated IC would require destruction of one or both ICs, and therefore, Applicants respectfully assert that one of ordinary skill in the art would <u>not</u> be motivated to incorporate one IC chip within another IC chip as suggested by the rejection. Accordingly, Applicants reiterate that one of ordinary skill in the art would not be motivated to combine Easter and Chorley in the claimed fashion.

For these reasons, Applicants respectfully submit that independent Claim 1 is not rendered obvious by Easter in view of Chorley, thereby overcoming the 35 U.S.C. §103(a) rejection of record. Since independent Claims 10 and 21 recite limitations similar to those discussed above with respect to independent Claim 1, independent Claims 10 and 21 also overcomes the 35 U.S.C. §103(a) rejection of record. Since dependent Claims 2-3, 5-7, 9, 11, 14-15, 18-20 and 26 recite further limitations to the invention claimed in their respective independent

Claims, Claims 2-3, 5-7, 9, 11, 14-15, 18-20 and 26 are also not rendered obvious by Easter in view of Chorley. Therefore, Claims 1-3, 5-7, 9-11, 14-15, 18-21 and 26 are allowable.

Claim 4

Claim 4 is rejected under 35 U.S.C. §103(a) as being unpatentable over Easter in view of Chorley, further in view of United States Patent Number 6,598,165 to Galasso (hereafter referred to as "Galasso"), and further in view of United States Patent Application Publication Number 2004/0243823 (hereafter referred to as "Moyer"). Applicants have reviewed the cited references and respectfully submit that the embodiments of the present invention as recited in Claim 4 are not rendered obvious by Easter in view of Chorley in view of Galasso and further in view of Moyer for the following reasons.

Applicants respectfully submit that Galasso and/or Moyer, either alone or in combination with the cited Easter/Chorley combination, fail to cure the deficiencies of Easter and Chorley discussed above with respect to independent Claim 1. Specifically, Galasso and/or Moyer fail to teach or suggest the limitations of "wherein said internal memory is further for storing data associated with said key-based cryptographic process" and "wherein said data is accessible only within said processor" as recited in independent Claim 1. Consequently, since Claims 4 recites further limitations to the invention claimed in independent Claim 1, Claim 4 is not rendered obvious by Easter in view of Chorley in view of

Galasso and further in view of Moyer. Thus, Claim 4 overcomes the 35 U.S.C. §103(a) rejection of record.

<div align="center">Claims 8, 13 and 22</div>

Claims 8, 13 and 22 are rejected under 35 U.S.C. §103(a) as being unpatentable over Easter in view of Chorley and further in view of United States Patent Application Publication Number 2004/0098591 by Fahrny (hereafter referred to as "Fahrny"). Applicants have reviewed the cited references and respectfully submit that the embodiments of the present invention as recited in Claims 8, 13 and 22 are not rendered obvious by Easter in view of Chorley in view of Fahrny for the following reasons.

Applicants respectfully submit that Fahrny, either alone or in combination with the cited Easter/Chorley combination, fails to cure the deficiencies of Easter and Chorley discussed above with respect to independent Claims 1, 10 and 21. Specifically, Fahrny fails to teach or suggest the limitations of "wherein said internal memory is further for storing data associated with said key-based cryptographic process" and "wherein said data is accessible only within said processor" as recited in independent Claim 1, and similarly recited in independent Claims 10 and 21. Consequently, since Claims 8, 13 and 22 recite further limitations to the invention claimed in their respective independent Claims, Claims 8, 13 and 22 are not rendered obvious by Easter in view of Chorley in view of Fahrny. Thus, Claims 8, 13 and 22 overcome the 35 U.S.C. §103(a) rejection of record.

<u>Claim 12</u>

Claim 12 is rejected under 35 U.S.C. §103(a) as being unpatentable over Easter in view of Chorley in view of United States Patent Number 6,031,992 to Cmelik et al. (hereafter referred to as "Cmelik"). Applicants have reviewed the cited references and respectfully submit that the embodiments of the present invention as recited in Claim 12 is not rendered obvious by Easter in view of Chorley in view of Cmelik for the following reasons.

Applicants respectfully submit that Cmelik, either alone or in combination with the cited Easter/Chorley combination, fails to cure the deficiencies of Easter and Chorley discussed above with respect to independent Claim 10. Specifically, Cmelik fails to teach or suggest the limitations of "wherein said internal memory is further for storing data associated with said key-based cryptographic process" and "wherein said data is accessible only within said processor" as recited in independent Claim 1, and similarly recited in independent Claim 10. Consequently, since Claims 12 recites further limitations to the invention claimed in independent Claim 10, Claim 12 is not rendered obvious by Easter in view of Chorley and further in view of Cmelik. Thus, Claim 12 overcomes the 35 U.S.C. §103(a) rejection of record.

<u>Claims 16-17</u>

Claims 16-17 are rejected under 35 U.S.C. §103(a) as being unpatentable over Easter in view of Chorley and further in view of United States Patent

Application Publication Number 2004/0025036 by Balard et al. (hereafter referred to as "Balard"). Applicants have reviewed the cited references and respectfully submit that the embodiments of the present invention as recited in Claims 16-17 are not rendered obvious by Okada in view of Balard for the following reasons.

Applicants respectfully submit that Balard, either alone or in combination with the cited Easter/Chorley combination, fails to cure the deficiencies of Easter and Chorley discussed above with respect to independent Claim 10. Specifically, Balard fails to teach or suggest the limitations of "wherein said internal memory is further for storing data associated with said key-based cryptographic process" and "wherein said data is accessible only within said processor" as recited in independent Claim 1, and similarly recited in independent Claim 10. Consequently, since Claims 16-17 recite further limitations to the invention claimed in independent Claim 10, Claims 16-17 are not rendered obvious by Easter in view of Chorley and further in view of Balard. Thus, Claims 16-17 overcome the 35 U.S.C. §103(a) rejections of record.

<u>Claims 23-24 and 26</u>

Claims 23-24 and 26 are rejected under 35 U.S.C. §103(a) as being unpatentable over Easter in view of Chorley and further in view of Moyer. Applicants have reviewed the cited reference and respectfully submit that the embodiments of the present invention as recited in Claims 23-24 and 26 are not rendered obvious by Easter in view of Chorley and further in view of Moyer for the following reasons.

Applicants respectfully submit that Moyer, either alone or in combination with the cited Easter/Chorley combination, fails to cure the deficiencies of Easter and Chorley discussed above with respect to independent Claim 21. Specifically, Balard fails to teach or suggest the limitations of "wherein said internal memory is further for storing data associated with said key-based cryptographic process" and "wherein said data is accessible only within said processor" as recited in independent Claim 1, and similarly recited in independent Claim 21. Consequently, since Claims 23-24 and 26 recite further limitations to the invention claimed in independent Claim 21, Claims 23-24 and 26 are not rendered obvious by Easter in view of Chorley and further in view of Moyer. Thus, Claims 23-24 and 26 overcome the 35 U.S.C. §103(a) rejection of record.

CONCLUSION

Applicant respectfully submits that Claims 1-26 are in condition for allowance and Applicants earnestly solicit such action from the Examiner.

The Examiner is urged to contact Applicants' undersigned representative if the Examiner believes such action would expedite resolution of the present application.

Please charge any additional fees or apply any credits to our PTO deposit account number: 50-4160.

Respectfully submitted,

MURABITO, HAO & BARNES LLP

Dated: __10 / 17 / 2008__   ____/BMF/_____

Bryan M. Failing
Registration No. 57,974

Two North Market Street
Third Floor
San Jose, CA 95113
(408) 938-9060